



Morgan, J. E. (2015). Understanding flooding in early modern England. *Journal of Historical Geography*, 50, 37-50.  
<https://doi.org/10.1016/j.jhg.2015.05.003>

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[10.1016/j.jhg.2015.05.003](https://doi.org/10.1016/j.jhg.2015.05.003)

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# Understanding flooding in early modern England

Accepted for publication in the *Journal of Historical Geography*, April 2015.

## Abstract

Flooding was a recurrent part of rural life in early modern England. Explanations of the historical understanding of floods have traditionally relied on religious and providential arguments made in popular printed literature. In this paper, popular printed accounts of flooding are brought together with under-exploited archival sources to provide a different description of perceptions of flooding in early modern England. Local manuscript accounts of flood events are found in the marginal notes inserted into local registers of baptisms, marriages and burials. Institutional records of Commissions of Sewers provide another perspective on floods, as community-staffed bureaucracies recorded and attempted to manage the damage caused by overflowing rivers and raging seas. Brought together, these local narratives provide a new and different view of the experience of flooding. Paying close attention to the ways in which flood events were narrativised, this paper explores the customary, religious, personal, and productive narrative frames invoked by contemporaries. By using underappreciated and traditional archival sources in new ways, this paper provides a rereading of early modern attitudes towards geographical phenomena previously derived from print.

Keywords: early modern flooding; narrative; providence; Commissions of Sewers; parish registers

Abbreviated title: Understanding flooding

On 30<sup>th</sup> January 1607 southwest England and Wales experienced some of the worst flooding in British history. A huge surge of salt and freshwater forced its way up the Bristol Channel and lower River Severn, crushing and overtopping flood defences in Devon, Somerset, Gloucestershire, Glamorgan and Monmouthshire. Thousands of farm animals and hundreds of people lost their lives.<sup>1</sup> The surge inundated 570 kilometres of coastline, leaving floods of between 1.5 metres and 3.5 metres in parts of England, reaching as far inland as the foot of Glastonbury Tor (22 kilometres).<sup>2</sup> The anonymous author of a contemporary printed account of the flood took it as a sign from God that England was sinning, and that worse was to come should the nation not repent. He hoped his fellow countrymen would prepare for

some tempest in one kind or another, as terrible unto us as that hath been to them, knowing that these prodigious overflowings of the waters, howsoever natural causes (as God's instruments do claim their parts in them yet they proceed from the Lord's own direction), who by His punishing of others with them, doth threaten grievous calamities, even against our vice, unless I say speedy repentance and amendment do avert his fearful wrath and judgement from us.<sup>3</sup>

In the inundated Severnside parish of Henbury, the curate John Owen and the two churchwardens William Mattock and the illiterate Thomas Smith came together to write their own description of this flood. Together, using the Old Style dating convention, they noted in their parish register that, 'The salt marsh was over flowed with the sea water on Tuesday the 20 January 1606 with great loss of all sort gotten beside men, women and children.'<sup>4</sup>

On 12<sup>th</sup> February a group of local lords, knights and worthies gathered in the untroubled north Gloucestershire village of Weston-sub-Edge. They sought powers to direct the recovery operation, and wrote to the Privy Council describing the 'great hurt and

damage by the rage and overflowing of the sea ... within this county of Gloucestershire' and the 'great loss and damage likely to ensue if speedy remedy be not provided to prevent the danger'.<sup>5</sup>

This paper attempts to account for the contrast between these understandings of the same flood. Written by a London scrivener and by flood survivors, and in a public, commercial genre, a more insular community resource, and a political appeal respectively, these accounts of one of Britain's largest floods present us with contrasting views of a damaging natural event, and invite us to consider why the same event was seemingly understood so differently. Reading these dissonant texts together, this paper offers an insight into the hydrographic cultures of early modern England through flood narratives, and uses the narrativisation of damaging natural events as a way to understand early modern human-environment relationships.<sup>6</sup>

With every flood comes an explanation, and in public discussions of events, often exhortation and blame. In early modern England, ballads, broadsides and chapbooks reported floods in a public, saleable genre, whilst local flood victims wrote their own narratives in a variety of manuscripts.<sup>7</sup> These survive in personal correspondence and, importantly for this article, as marginal notes in parish registers and testimony given to local flood control organisations – texts with communal audiences. In what follows, explanations and understandings of flooding in public media are contrasted with local accounts, to understand how early modern English people experienced flooding, and what they took floods to mean. Particular attention is paid to the ways in which local communities wrote

their relationships to rivers, relationships that were rooted in local custom, family, history, work, and political economy.

Research into floods and damaging natural events more broadly is currently flourishing. 'Natural disasters' have emerged from this literature as complex events with a multiplicity of causes and effects, and are only seen as natural insofar as they involve geophysical, meteorological or other physical processes.<sup>8</sup> The impacts of these forces are unevenly socially distributed, and so-called 'natural' disasters are jointly 'physical events and social or cultural occurrences', constructed by socio-economic and cultural conditions.<sup>9</sup> Disasters occur as two 'separate trajectories' collide; hazards, such as rivers or tides, meet with the socio-cultural complex of a human population.<sup>10</sup> Thus culture has a crucial role to play in the construction of floods and their histories.<sup>11</sup>

Narratives and artifactual memorialisations of disasters are part of communal coping strategies and shape processes of remembrance and recovery. As 'embedded' cultural objects that do more than report events, they are 'significant social actions' that 'cannot avoid a covert exercise of power'.<sup>12</sup> The narrativisation of an event mediates how it is experienced and represented, as stories and experiences become mutually reinforcing parts of an 'intertextual chain of associations'.<sup>13</sup> Narratives 'presuppose meaning', produce it through explanation and description, and, particularly in the wake of trauma, attempt to 'create meaning from non-meaning'.<sup>14</sup> Cultural geographer Yi-Fu Tuan has argued that integrating the experience of shock into one's 'homeplace' is an important element in reappropriating 'landscapes of fear'. Thus the historically contingent stories societies tell to explain shocking events serve as 'shelters built in the mind' against 'chaos' and 'doubt'.<sup>15</sup>

The creation and performance of stories that seek to explain ‘what went wrong in the interaction between culture and nature’ then play a key role in societies’ attempts to cope with such shocks.<sup>16</sup>

By reading stories told about flooding in this way, we can understand them as parts of communities’ experiences and interpretations of the natural environment. Differing frames of reference structure elements of communities’ coping strategies. The narrative frames invoked in water management ‘mobilise the values against which “risks” and... “problems” are judged to exist.’<sup>17</sup> Languages and registers employed in narrative description limit and constitute the conceptual range available for meaningful discussion, making them crucial in shaping understanding and subsequent action.<sup>18</sup> The link between the experience of flooding and its narrative framing has been made by McEwen and Werritty. Investigating the 1829 ‘Muckle Spate’ flood in Highland Scotland, they show that in a society with variable literacy rates, high religiosity and no centralised flood defence provision, interpretations of flooding invoked divine explanations more than where flood defence is provided by the state.<sup>19</sup> Grattan and Brayshay have also shown how interpretive frameworks could act as markers of social distinction. In responding to the volcanic eruption of the Laki fissure in Iceland in 1783, elite observers of European weather conditions shunned religious interpretations as a means of distancing themselves from the majority of the population.<sup>20</sup> The frames within which floods are narrativised are then important both for understanding the communal experience of natural phenomena, and the direction of coping strategies.

Despite the methodological sophistication that historians have used to approach more recent floods, there is little historical scholarship on early modern English floods.

Research into rivers and flooding has mainly focussed on transport improvement, land reclamation and drainage.<sup>21</sup> James Galloway has illuminated adaptation and maladaptation to changing flood patterns in medieval eastern England.<sup>22</sup> Greg Bankoff has demonstrated that the East of England shares a history of flood risk and adaption with other North Sea Basin coastal regions.<sup>23</sup> Stephen Rippon has also analysed the variety of medieval perceptions of English wetlands, paying attention to secular as well as spiritual ‘emotional responses’ to changing landscapes.<sup>24</sup> Climatologists have made use of early modern weather diaries, and cultural and religious historians have discussed weather and ‘wonders’ – freak weather and astrological events – but *disastrous* weather has been relatively neglected.<sup>25</sup> Lists and compendia of flood events have been published, but as yet the cultural aspects of flooding identified in recent ‘disaster’ research have yet to be examined in the early modern English context.<sup>26</sup>

### PROVIDENTIAL PAMPHLETS

There is an abundance of early modern literature narrating and explaining natural and riverine phenomena. These popular ballads, pamphlets and broadsides are a rich and significant source base. Titles such as *A Miracle of Miracles, and God’s Warning to His People of England*, make the providential tone of this literature unmistakable.<sup>27</sup> After the ‘Great Storm’ of 1703 Daniel Defoe observed that ‘in public calamities, every Circumstance is a Sermon, and every thing we see a Preacher’, a maxim borne out in the vast majority of early modern literature on flooding.<sup>28</sup> Here floods were always righteous. In 1570 floods were sent to punish ‘covetous lease-mongers’ and ‘greedy graziers’; in 1607 floods punished both ‘our transgressions’, and the misplaced faith in ‘natural’, rather than spiritual explanations of recent extreme weather.<sup>29</sup> Floods were to be heeded as admonishments

from a wrathful God, with readers warned to 'Amend lest a more fearful punishment and a longer whip of correction draw blood from us'.<sup>30</sup> When sinners escaped a disaster, authors looked to the Book of Luke: 'except ye repent, ye shall all likewise perish.'<sup>31</sup> The afflicted in these situations were not the only sinners, rather they were punished as an example so that 'thou mayest thy self in time look unto thine own courses, lest He proceed in the same or some more grievous manner with thee'.<sup>32</sup> This was a discourse of admonitory warnings common to literature on other disasters.<sup>33</sup> The vitality, diversity and 'elasticity' of providential interpretations of calamities made disasters a 'perennial homiletic theme'.<sup>34</sup> One highly providentialist narrative of the 1607 floods, *A True Report of Certain Wonderful Overflowings of Waters*, enjoyed transcontinental appeal, and was republished in both French and Dutch.<sup>35</sup>

Even when the causes of floods were described in practical, physical terms, their ultimate cause was said to come from Heaven. Floods were 'second order' events. A flood might be caused by earthly processes, but these were set in motion by God. The immediate cause of flooding in 1683 was 'immoderate Rains accompanied with Prodigious Thunders and Lightnings', but this was no meteorological event – the weather was 'plainly demonstrating that when the Almighty pleases, he can Command the Elements to fight against us.'<sup>36</sup> Thus even 'natural' explanations of events existed within a providential system in which the Almighty was always *prima causa*. In works of physico-theology, particularly in the later-seventeenth century, God was seen to operate *through* a 'plastic nature' – 'a regular and predictable instrument' entirely subordinate to Him.<sup>37</sup> In these explanations, providence functioned as a frame wide enough to encompass discussions of human and natural agency, as these were understood to have ultimately come from God.



Providentialism provided a spur to reformative action that showed contrition to an angry and righteous God. In the period 1541 to 1866, the English and Scottish Churches ordered at least 103 separate fasts, thanksgivings and prayers in response to natural events.<sup>38</sup> Much like the pamphlet literature, some of these prayers were copied, refreshed and updated from one crisis to the next.<sup>39</sup> National days of repentance, ‘for the better humiliation of the people’, were adopted with the greatest enthusiasm by the godly Long Parliament during the Civil Wars, yet were more popular with political hierarchy than with often reluctant parishioners.<sup>40</sup> These placatory prayers formed part of a providentially-inflected coping strategy with which communities sought to mend spiritual rifts that, in this schema, had precipitated damaging events.

This overt providentialism has preoccupied historians writing about the understandings of natural phenomena in early modern England. Ole Peter Grell emphasises the providential interpretation and understanding of natural disasters which were sent by God to ‘chastise and warn’.<sup>41</sup> Alexandra Walsham demonstrates how damaging natural events were interpreted providentially and polemically in pamphlet literature. Walsham argues that the spread of Protestantism did little to diminish the religious significance of natural physical events. Once seen as miraculous, they came to be narrativised in terms of Providence – as God’s portentous warnings and righteous judgement.<sup>42</sup> Throughout the seventeenth century, and amongst all ranks of society, ‘many continued to cling to the idea that the natural world was a billboard on which the Lord painted thundering sermons about the dire consequences of sin and impiety.’<sup>43</sup> These attitudes were not confined to reformed Europe, but were cross-confessional, polemical tools.<sup>44</sup> Providentialist interpretations of

events were so common, Walsham argues, that they formed an 'ingrained parochial response to chaos and crisis'.<sup>45</sup>

Providentialist pamphlets, typically costing four pence each, were targeted at an educated readership of middling-income consumers, and designed to be both informative and didactic.<sup>46</sup> This was literature engaged in the process of Reformation. As early forms of 'Protestant propaganda', the ballads and pamphlets of contemporary news were 'steeped in the language of providence and judgement'.<sup>47</sup> Stories of submerged and destroyed towns echoed the Biblical Flood, and when disasters were visited on transgressive communities 'exemplified a code of ethics which the Protestant clergy, no less than their precursors, were anxious to entrench'.<sup>48</sup> Common tropes and images displayed a remarkable continuity with the medieval Catholic past. Ian Green views this pamphlet providentialism as less a 'code of ethics' and more of a shared frontier at which a variety of strands of Protestant thought met, which 'looked and functioned very differently according to where one was standing'.<sup>49</sup> Likewise, downplaying any unified providentialist doctrine, Lake and Questier argue that this literature encompassed a 'bundle of attitudes, assumptions and expectations' that accommodated a range of proselytising agendas from a diversity of Protestant ideologies.<sup>50</sup> Providentialism was then a shared resource of spiritual authority that Protestants drew upon to interpret the natural world. It follows that the readings of the natural world within them should be seen as contingent elements of an unfinished debate, part of a process of Protestantisation. Providential accounts of great deluges and inundations are, therefore, less transparent windows on a universal early modern attitude towards flooding and riverine phenomena, and more indications of an overarching cosmological framework which early modern people could choose to interpret the physical world.

As yet, cultural approaches to early modern English flooding have only made use of cheap print literature, and have as such only been able to account, quite correctly, for providential understandings. However, this source base is problematic. Late medieval accounts of floods and disasters share common features with early modern print – a reliance on ‘biblical motifs’, the creation of a canon of tropes and images, and the literary exaggerations of relatively routine events as ‘catastrophic’.<sup>51</sup> Early modern printed narratives are formulaic, constitute a genre, and rely on common tropes and images to communicate disaster stories. These problems led Rohr to conclude that late medieval accounts were more biblical paraphrases than independent descriptions of events, posing significant problems for the cultural history of disasters. However, in the early modern period manuscript sources that are unavailable to medievalists render some of these problems solvable. Whilst floods could be inserted into providential narratives found in print accounts, providence was not the only frame of cultural reference available to explain floods and give them meaning. A reading of several source bases together shows that providential interpretations of flooding were not necessarily as dominant as the current historiography suggests (particularly at the parochial level), and that floods were understood as having complex customary, social, political, and personal, causes and meanings as well.

Contextualising providential printed narratives of early modern floods illuminates their remarkable coherence as a genre. Printed flood narratives were as much merchandise as they were literary and philosophical exegeses on disastrous events. News reports were written to excite and intrigue as much as they were to inform or proselytise. Joad Raymond has argued that reading the news was often done ‘without purpose, through a sense of

compulsion or for pleasure'.<sup>52</sup> Readers bought into a 'competitive branch of the book trade full of titillating tracts', produced and consumed in large part as entertainment.<sup>53</sup> Whilst printers preferred steady-selling titles, there was money to be made in selling works on controversial and contemporary events.<sup>54</sup> After a shocking event, printers rushed to put out pamphlets describing and explaining what had happened.<sup>55</sup> Five titles were registered with the Stationers' Company after the 1607 flood, along with another extant but unregistered tract.<sup>56</sup> The popularity and saleability of these accounts was so great that printers often registered two formats of the same narrative, a chapbook and a ballad, appealing to different markets.<sup>57</sup>

There was a great contemporary appetite for narratives of 'wonderful overflowings' and 'woeful inundations', along with other 'wonder' tales. These wonder tales are sensationalist, exaggerated, and conform to specific generic tropes that constrain narratives, and distort purportedly 'true' items of news. Disaster narratives formed a specific subgenre of wonder tales: 121 separate titles were registered with the Stationers' Company from 1554 to 1708.<sup>58</sup> Some printers invested heavily in the 'monstrous news' genre. John Trundle was a prolific and notorious publisher of such news, so much so that John Taylor satirised 'monstrous news [that] came Trundling in my way'.<sup>59</sup> Trundle was at the centre of a printing circle that included fellow prominent wonder-printers Henry Gosson and John Wright.<sup>60</sup> He was the printer of forty-five chapbooks in his career from 1603 to 1626, eleven of which were sensational news accounts, more than any other genre in his repertoire.<sup>61</sup> Other notable sensational news printers were Edward White and his son (ten titles), John Wright (ten out of seventy-eight in total) and Henry Gosson (seven out of sixty-

nine in total).<sup>62</sup> These were works that were printed and sold quickly, rarely making it past a single print run.<sup>63</sup>

Across several chapbooks and ballads, printers used generic images both as illustrations and almost brand symbols. Woodcuts of floods feature common images of submerged animals, houses and parish churches, some with additional floating cradles and praying parishioners. Pamphlets published after the 1607 flood contain bricolage images of various stories reported from Monmouthshire, Somerset, Gloucestershire and Norfolk (figure 1 – *at end*). They also closely resemble images of the ‘windy winter’ of 1613, and a depiction of flooding on the Rhine in the mid-seventeenth century (figure 2 – *at end*). These generic images erase the specificities of particular disasters, and compress individuated sequences of causation, impact and blame into formulaic physico-religious events that have homogenous causes, effects and interpretations.<sup>64</sup>

Common linguistic tropes point to a distinct disaster genre. News is ‘lamentable’, ‘woeful’ and ‘wonderful’. Accounts of floods contain narratives of the coming of waters, losses in houses, goods and livestock, and then a plethora of individual stories of tragedy, escape and heroism. These are all framed with providential warnings as introductions and conclusions. Formulaic images mirror the formulaic narratives of disasters; they are both ‘intertextual’ and ‘interpictorial’.

Common literary images were often used to appeal to a particular readership. Many printed flood narratives emphasise the common literary figure of the merchant, one of the most popular subjects in Elizabethan literature.<sup>65</sup> Given such ‘literary interest in commercial wealth’ it is unsurprising that particular attention was paid to merchants’ and tradesmen’s losses.<sup>66</sup> *A True Report of Certain Wonderful Overflowings* emphasises losses by Bristol and

London merchants, and the cities' strategic importance for trade.<sup>67</sup> In an account of coastal flooding in 1570, report is given of the swift escape at the rapidly inundated Saracen's Head in Newport of 'certain Merchants (sitting there at dinner)'.<sup>68</sup> These accounts privileged stories about merchants, a strategy that could make them more saleable and popular. This generic approach acts against the specificity and 'local-ness' of events as stories about local devastation are subsumed within wider, more accessible and saleable forms.

Focussing on merchants also meant focussing on London as a locus of credible information. As with monster pamphlets, disaster reports anticipated scepticism, and used an elaborate apparatus of veracity, based on the credibility of London, to prove their truth.<sup>69</sup> *Lamentable newes out of Monmouthshire* questioned the veracity of first-hand accounts, complaining of the 'usual unfaithfulness of men ordinarily in reporting of such accidents'.<sup>70</sup> Lest 'any should suspect the Veracity' of *A Wonderfull cry from the country* because it contained news of 'Instances remote', 'Disasters nearer hand' were also related for comparison.<sup>71</sup> Even local reports of disasters, printed as epistolary accounts, were subsumed within a news culture that emphasised a credibility peculiar to London and printed newsbooks. Correspondents were at pains to frame their reports in a manner that would make them appear 'true' and certifiable. Should anyone wish to be 'farther satisfied concerning the Truth' of a pamphlet relating coastal flooding in 1671, they could ask Richard Clay, 'lately come from Boston' to Wool Quay, 'who affirms that he rowed a Boat over the Banks of *Boston*'.<sup>72</sup> Much like continental military news, these accounts of disasters featured gentlemen's private writings, often 'reluctantly' shared, including information on the personal relationships of authors in an attempt to establish credulity.<sup>73</sup>

In the quintessential piece of popular disaster literature, Daniel Defoe made an explicit statement regarding his construction of the 1703 storm and floods. Having solicited eyewitness reports from readers of the *Daily Courant* and *London Gazette*, he made conscious curatorial and narrative decisions to present the storm as a nationwide tragedy, omitting 'common and trivial Damages'.<sup>74</sup> Defoe reported that he

put in nothing here common with other Accidents of like nature; or which may not be worthy of a History and a Historian to record them; nothing but, what may serve to assist in convincing Posterity that this was the most violent Tempest the World ever saw.<sup>75</sup>

The metropolitan selection, verification and curation of news affected how disasters were reported and constructed. Local narratives were repackaged and shaped to fit a commercially viable genre that could be a lucrative part of a printer's business. Thus, these flood narratives are structured according to generic tropes of disaster reportage.

This body of printed literature is, therefore, the site of competing motivations. Authors tested the boundaries of Protestant physico-theology, using demotic forms to push specific confessional interpretations of scripture. Printers exploited time-sensitive market opportunities, chasing sales to the middling sort and re-hashing parts of old pamphlets to cash in on the latest disaster. But what were readers doing? We know relatively little about how these texts were read and interpreted, and whether a providential literary corpus meant a providentially-minded readership. Green notes how the 'most sensational and theologically the most conservative' providentialist texts sold well, but that, overall, the market for providential works was small. He conjectures that the potential for a variety of interpretations made providentialism unattractive, and that other interpretations may have prevailed 'in the countryside'.<sup>76</sup> Yet Green's argument, and the others discussed above, are derived from the evidence of print culture.<sup>77</sup> The following sections contrast the image of a

highly providentialist early modern *mentalité* derived from a study of print with more local, personal accounts derived from people's own experiences of flooding. The diverse authorship of these local accounts can give us some insight into how far ideas and images circulated in print were accepted and utilised by those who experienced floods and wrote about them.

### LOCAL MANUSCRIPT SOURCES

Moving from these printed sources to local accounts reveals fewer formulaic and providential responses to flooding. The following sections draw on under-exploited parish registers and minute books from courts of sewers. Parish registers are local records of baptisms, burials and marriages, officially required from 1538, that generally survive from the late sixteenth century onwards.<sup>78</sup> Due to their obvious genealogical utility they have mainly been used by family historians, historical demographers and religious groups.<sup>79</sup> The records of Commissions of Sewers are made up of court minutes from sessions governing flood defence and drainage at a regional level and below.<sup>80</sup> These have been used by landscape and environmental historians researching the management of water in the English landscape, but have been neglected by the discipline at large due to their primarily local significance and technical nature (Sidney and Beatrice Webb described them as 'neither important nor exciting', 'primitive' and as probably the 'most obscure corner in the whole of English Local Government').<sup>81</sup> The flood narratives found in these two sets of sources can illuminate a more complex history of early modern understandings of flooding than is currently provided by scholarship that focusses primarily on print.



Parish registers

Despite the nationwide use and survival of parish registers, as a corpus they are unstructured and idiosyncratic. There is incoherence even within registers; records of events appear in-line with contemporaneous baptisms, marriages and burials, at the end of registers, or scrawled on seemingly random pages.<sup>82</sup> They have a diverse and inconsistent authorship, depending on when they were written and the incumbent parochial officials' adherence to government orders. The earliest compulsory registers were to be written every Sunday by the priest, and after 1598 were to be signed by two churchwardens.<sup>83</sup> The book itself was to be kept in a chest with multiple locks and keys to be held by the priest and the churchwardens.<sup>84</sup> The Barebones Parliament of 1653 attempted to secularise the registers by taking them out of the hands of priests, and placing them in the hands of 'Parish Registers', who were to be elected by all ratepayers, sworn in under oath and approved by a magistrate.<sup>85</sup> This practice was not widely adopted, and many registers remained in the hands of clergy. Some, like Reverend John Wade of Hammersmith, were so close to their registers that they also used them as personal diaries.<sup>86</sup> From 1598 new entries in the register were to be read from the pulpit every Sunday, and parishioners complained if this was not done.<sup>87</sup> Whether written by a sole priest or by an elected official, these registers in their composition, verification and public reading were communal documents.

Despite being locked away, parish registers were generally accessible to those who wished to consult them. John Favor's Halifax parish register was an 'important part of godly reading', and tales of wayward parishioners' providential judgements were circulated amongst godly readers, including Nemeniah Wallington who included them in his collection of 'Examples of God's Wrath'.<sup>88</sup> William Averell, clerk of Saint Peter's, Cornhill, included

verse on the instructional value of his parish register. On the register's flyleaf, Averell entreated his parishioners to live well to ensure they were placed in 'the Book of Life', 'Where Gods Elect are for ever inrolled'. The parish register itself was instructive so that parishioners of

... every age and calling,  
May here behold their faces:  
Their rising and their falling,  
Their ends and wretched cases:  
Which glass were it well used,  
Life should not be abused.<sup>89</sup>

Bishop Kennett of Peterborough (1718-28) encouraged his clergy to note down incidents of local importance, such as fires and floods, so that they might become 'chronicles of many strange occurrences that would not otherwise be known, and would be of great use and service for posterity to know'.<sup>90</sup> Such descriptions of natural phenomena informed John Morton's *Natural History of Northamptonshire* (1712).<sup>91</sup> In their generation and social circulation these registers are chronicles and repositories of 'communal memory'.<sup>92</sup> As semi-official narratives written and shared by parishioners, memoranda in parish registers are part of what research into modern flooding has termed the 'folk' archive of local flood memories.<sup>93</sup>

Whilst print narratives took the microcosmic, embellished it, extrapolated from it and sold it, local stories, often deemed uninteresting or unworthy in a national context, retained a 'parochial relevance' that sustained but isolated them.<sup>94</sup> It is this relevance that makes such accounts useful in understanding the local meaning and impact of flooding.

They have very different frames of reference to the narratives that were produced for wider consumption, and revolve around local place and custom, personal experience, domesticity, and homeliness. Furthermore, there are more flood events recorded here than in printed news accounts. Taken together, they give a picture of damaging floods as localised community landscape events.

These local accounts report the effects of flooding not on merchants, national commerce, and great ports, but on locally important customary and communal arrangements. Customs 'structured [the] lived environment' of rural communities, and this landscape of custom is reflected in parochial flood narratives.<sup>95</sup> At Tewkesbury, following the 1588 Avon flood, local thatching and meadow management practices were disrupted. Meadows were submerged, with much grass 'found unmowed the Bartholomew tide following, the greatest part of which ... was used for thatch.'<sup>96</sup> At Attleborough, Norfolk, in 1625/6, a flood inundated the 'Common by the Park and in the Park' and two bridges were carried away.<sup>97</sup>

Large floods both disrupted and invoked the myriad distinct and specific local arrangements in affected communities. In 1607 the effective use of common property saved the lives of twenty parishioners in Arlingham, Gloucestershire. Surrounded on three of its four sides by the Severn, the parish kept a communal boat. The register here notes that

had it not been for the Common boat, which was commonly used upon the 10th day, and in the tenure of Mr Robert Yate and Thomas Driver many, about the number of 20, had lost their lives, or at the least been greatly endangered to be pined or starved to death.<sup>98</sup>

Authors highlight the local impact of destructive events when they invoke customary and communal arrangements. These were 'important elements of ... individual and collective

identities', and 'knowledge systems which governed life', structured senses of place, and demarcated 'limits of belonging'.<sup>99</sup> These are lost in accounts that relate the impact of a physical event to wider audiences.

Rather than describing floods in places relative to London, floods in parish registers disrupt particularly local landmarks. The register for Arlingham notes that water in 1607 was 'so high that one might have moored a boat at Thomas Vigne's gate'. The flood was destructive, as the fields of 'Horsecroft and Newbridge being then sowed with wheat, [were] all overflowed'.<sup>100</sup> Likewise, at Almondsbury the vicar recorded that

water was in Rednyng in Sansom's new chamber to the upper step save two, and in Hobbes' house six foot high. In Ellenhurst at Wade's house the sea rose near 7 foot and in some houses there it ran in at one upper window and out at another.<sup>101</sup>

These specific referents are of only local significance. We do not know where Vignes' gate was, or how high the steps to Sansom's new chamber were, but it was significant for Arlingham and Almondsbury that a boat could be moored at the gate and that water lapped the new steps. David Rollison has referred to early modern rural landscapes as 'memory palaces', in which certain places and landmarks were invested with meaning beyond their immediate practical utility or aesthetic qualities. This is further evidenced by narrative accounts of flooding from parish registers: floods were significant when they broke into the 'memory palace' and disrupted communities' mnemonic landscapes.<sup>102</sup>

Studying the telling of tales amongst eighteenth-century Parisian chapmen, Robert Darnton observed that when 'we cannot get a proverb, or a joke, or a ritual, or a poem, we know we are on to something.'<sup>103</sup> A similar semantic disjuncture is apparent here. The communal records of devastating floods are recorded in the language of the affected

communities. Narratives are locally owned and embedded, with no desire to explain in terms of communicable landmarks, measurements and monuments. Where individuals sought to include their stories of disaster in a national compendium, as with Defoe's *The Storm*, they used common referents and measurements. An elm uprooted at nearby Slimbridge is here described as being driven 'full an Ell' (45 inches) into the earth, 'Eighteen Foot and half in the Diameter', weighing 'Thirteen Ton at least'.<sup>104</sup> Records of calamity that were produced by and for local memory retain a greater degree of local sentiment than those produced for wider consumption. Idiosyncratic parochial narrative accounts of flooding reflect the discrete and specific experiences that are produced by the meeting of a destructive physical force and the complexities of local communities – they interrupted, and were then reintegrated within, particular mnemonic landscapes that both shaped and constituted community.

Parish register narratives invoke history and memory on a smaller scale than the national narratives that placed local events in longer chronologies of disastrous events.<sup>105</sup> Whereas pamphlet literature connected floods with the book of Genesis, or previous national flood events, parish register accounts operate on locally-specific timescales.<sup>106</sup> Direct comparisons in print placed current events into a history of disaster, linking the sufferings of contemporaries with those of revered ancient civilisations, placing them in a poetic, historical and philosophical context that could invoke a reader's literary horizon. Daniel Woolf has identified a tendency in early modern English historical writing that saw 'the local past... often submerged into a "national" past'.<sup>107</sup> This occurred in print accounts, but was avoided in parochial accounts that show an attitude towards history that is often

unconcerned with comparison, and instead relates events to the memories and experiences of the people and places affected by flooding.

Local memory was particularly important in understanding the severity of a flood. In 1673 in the parish of St Mary's, Reading, the register noted how a higher flood could not be 'remembered by any Man here living'.<sup>108</sup> Likewise, in 1686 in Hawkeshead, Lancashire, a storm produced a 'terrible flood as the like of it was never seen in these parts by no man living'.<sup>109</sup> The 1725 flood in Flamstead, Hertfordshire, was described as 'the biggest flood that ever was known'.<sup>110</sup> In Welford-on-Avon, Warwickshire, in 1588, the flood was significant not because of echoes of the general deluge, or because of regional or national flood events, but because 'old Father Porter, buried about three years past, being then 109 years of age never knew it so high', and because John Perry had known water to come up to his bed, but not as high as 'a yard and a half' as it was on this day.<sup>111</sup> Long Newnton, Gloucestershire, felt a combination of earthquake, storm and flood in November 1703 to which they found no 'parallel of it in our Chronicles.'<sup>112</sup> In Almondsbury, Gloucestershire, the primacy of local flood history is made explicit by the vicar John Paul who, motivated by his experience of the devastating 1607 flood, wrote a chronological history of floods in the parish on the front of the register stretching back to 1483.<sup>113</sup>

In the printed literature, tales of merchants, gentlemen and unnamed women and children are provided to demonstrate the powerful effects of flood surges. In parish memoranda individual stories are also related, but on a more personal level. A flood in Ketton, Rutland, in 1709 startled the vicar Robert Butcher. It was 'a remarkable flood, so very extraordinary that the water thereof came into the kitchen of the Vicarage house of Ketton, which truth is attested by me Robert Butcher'.<sup>114</sup>

Family relationships are often noted giving us an insight into the importance of kinship at times of crisis. At Morville in Shropshire the 'great flood' of 16<sup>th</sup> December 1662 meant that John and Anne Crappe had to have their son John baptised in neighbouring Tasley, with the water so fierce 'that they could not go to their parish Church'.<sup>115</sup> Robert Langdon, parish clerk of Barnstaple, noted that the 1607 flood caused 'the death of one James Frost, a looker and two of his children, the which his house fell down upon them and killed them'.<sup>116</sup> At Welford-on-Avon, flood waters 'did take away one Sales's daughter of Grafton, out of Hillborough meadow' and carried her on a hay rick over a quarter of a mile to Stratford Bridge.<sup>117</sup> The waters here were so fearful that they caused a mother to forget her child:

John Perry's wife was so amazed that she sat still till she was almost drowned, and was well-nigh beside herself, and so far amiss that she did not know her own child when it was brought in to her.<sup>118</sup>

In Arlingham the 1607 flood was particularly memorable for the vicar Henry Childe, as the salvation of his wife and daughter were at stake:

Upon the same day Mrs Anne (who then was not churched), for fear of the waters, was, with Mr Childe, then vicar, and his family, fain to be hurried over with the boat from the Vicarage. And this day was just 3 weeks after Elizabeth Childe was born.<sup>119</sup>

Here it was not the occurrence of a flood that was soteriologically dangerous, but the immediate effects of the flood – that Mrs Childe was unable to be 'churched' after giving birth.<sup>120</sup> Childe was later moved to reflect poetically on three floods experienced during his tenure at Arlingham:

Thrice have I seen a fearful inundation  
Within the space of two and twenty years,  
As few of my coat have in all their station;

Which when it comes (as't will) unto men's ears  
 What hart so hard that can abstain from tears?  
 But woe is me that I am first to dwell  
 Where seas, enraged with winds, so proudly swell!  
 God knows who shall survive to see the next,  
 To be, as I have been, with fear perplexed.<sup>121</sup>

Despite the importance of local, customary, historical and familial contexts for flood victims, parish registers are not entirely free of providential understandings of flood events. Local narratives do occasionally contain providential interpretations, which were indeed 'a practical source of consolation in a hazardous and inhospitable environment'.<sup>122</sup> The register from Headcorn, Kent, shows a tradition of providential interpretations of particularly bad floods. In 1625, the register records that 'such a flood of water upon the grounds of the said parish as drowned all the meadow ground to a great value such as in the memory of any man living never was seen the like'. The scribe goes on to note: 'I would to God that it might be a warning to turn us from our sins which was the cause of the same fearful... Judgment and thereby to amend ourselves... to the preventing of greater [harm].' After another flood in 1671, the 1625 flood was recalled, and God's hand again detected in its cause. There was

a very great and remarkable flood such an one as the like had not been forty years before, to the great damage of the inhabitants and others. Now from this and all other judgments (which may justly be inflicted upon us for our sins) the Lord deliver us.<sup>123</sup>

In Almondsbury vicar John Paul looked to God not as the *cause* of the 1607 flood, but as a benevolent mitigator in the weeks after the flood:

God grant that the grounds now drenched in the deep may be recovered and become fruitful again with speed, else one calamity will follow after a former misery as one wave of the sea do follow another.<sup>124</sup>



In Hawkeshead, a flood in 1686 'caused great hurt the never like was known', and the scribe there recorded his prayers for mercy: 'I pray God of his great mercy grant that none which is now living can never see the like again.'<sup>125</sup> These examples serve as important reminders that providential interpretations of flooding, particularly in hopes for recovery, were indeed relevant to flood victims. Their comparative scarcity among local sources, however, points to the importance of other local interpretive strategies.

Together these parochial narratives emphasise local place, local people and local custom. Events that clearly shook communities are narrativised in such a way as to restate the fundamentals of the 'extensive value system of neighbourly relations'.<sup>126</sup> As coping strategies they reaffirmed the powerful bonding image of the well-ordered community encoding 'usable' memories that 'pointed to the endurance of community'.<sup>127</sup> Geographical research has demonstrated how the impacts of climatic events are unevenly socially distributed.<sup>128</sup> Clearly these floods had differential effects on the members of these communities – particularly affecting the elderly, the young and post-natal mothers in these examples. Responding to these stresses and strains on the idea of community, the narratives found in parish registers were part of corporate coping strategies that 'tied people together, providing a stock of shared experiences'.<sup>129</sup>

#### Commissions of Sewers

Whilst the parish registers give us a window on local literate culture, records of Courts of Sewers give us access to a world of oral culture. The records of Commissions of Sewers used here are the transcribed proceedings of oral court sessions along with copies of written evidence and petitions submitted to commissioners relating to flooding and drainage.

Typically, a jury of twelve men would present information about flood defences in a specified area before a group of commissioners, who would deliver orders based on this evidence, all of which was transcribed by a paid Clerk of Sewers. The juries were staffed by men of the 'middling sort', amongst whom were found 'small knots of reliable men' who served in local public office.<sup>130</sup> By the request of the Gloucestershire Commissioners of Sewers, for example, they were the 'very sufficient', 'honest and substantial men' of the manors liable to flood.<sup>131</sup> Instructions given to jurymen in the early 1660s spoke of the assembled ranks of jurors at Spalding as 'Men grown Grey in this employment'.<sup>132</sup> Amongst the commissioners were manorial lords, the very wealthiest yeoman farmers, members of the peerage, and members of parliament.<sup>133</sup> In contrast, the juries were made up of men of good credit and standing in their local communities, deemed 'good and lawful' by their neighbours.<sup>134</sup> The records produced in these court sessions are thus transcribed and edited versions of poly-vocal conversations that involved the more prosperous and well-respected members of local society.

The flood narratives contained within these sessions were told for both the present and for posterity. Jurors' presentments offer legal and customary readings of local hydrological issues, and are, like the other sets of sources, far from dispassionate relations of events. As transcripts of oral custom, written presentments were both a threat and an opportunity for local communities. The documentary record of custom 'fixed in text for posterity what memory had been able to forget and circumstance to forgo', leaving texts as an 'unflinching reference point against which any future alterations in practice could be measured'.<sup>135</sup> This hindered the malleability of oral custom and the contextual meanings it contained within its 'community of talkers'.<sup>136</sup> Yet a fixed textual record of a right or

obligation could be of great assistance in years to come, and contemporaries acknowledged this political potential within sewers' juries. In 1630, for example, Charles I complained about a highly politicised jury blocking drainage schemes in Lincolnshire. Jurymen had obstructed drainage and 'induce[d] distraction and the overthrow of the business', with their 'partial and unsafe verdicts' that continued 'to give ear to forward men' and create 'unnecessary difficulties'.<sup>137</sup> These are then texts that are also engaged in dispute and contestation, offering partial, political readings of flood problems that formed part of strategies to cope with recovery and maintenance costs.

These records emphasise local understandings of immediate human impacts on hydrologic systems. The great flood of 1607 both overtopped and broke down sea defences. People did whatever they could to remove water stopped up behind sea walls, including breaching their own defences to allow water to escape. Complaints about subsequent floods caused by these actions are common:

after the great flood came down into John Hort's orchard in Redwick, and there was cut a great sluice to let forth the water, [which was] never since made up sufficiently to defend the same, but every high tide, we your poor suppliants being dwellers there, be greatly damnified and almost undone thereby.<sup>138</sup>

The Surrey and Kent commissioners attended to problems caused by human-induced flooding. In March 1577 a 'Mr Willowes' was put in charge of floodgates on his land at Deptford, and was ordered to 'keep the water there indifferently between the miller and others grieved at all times according to the water mark when land waters come down extraordinarily.'<sup>139</sup> Not only were extraordinary waters expected, but they were expected to be dealt with through careful management. When waters beyond even extraordinary expectations caused flooding, commissioners were also keen absolve riverside inhabitants

of any fault. In May 1576 a breach in Church Marsh caused a flood in Crooked Acre in Deptford. This was on the land of Miles Case, whose defences failed to withstand the force of the water. The flood here was described as having been caused specifically 'by the violence of the great flood of land water, and not by the default of Miles Case'.<sup>140</sup> In these records, acknowledgements that human activity played a large part in determining the occurrence and severity of flooding are much more apparent than in providential pamphlet literature.

Old flood defences might cause damaging flooding in these records. In 1575 a bridge in Lincolnshire was deemed insufficiently wide to allow water to pass under. It was

too narrow for [the] issuing of ... water in the Beach at great downfalls or at the utterance of fen waters [in] watery years. Wherefore it is thought expedient to have the said bridge half a yard wide[so] it may sufficiently convey all waters and at all such times out of raging downfall or [in] watery years.<sup>141</sup>

In Gloucestershire, faulty seawalls at Oldbury were repeatedly recognised as producing hazardous conditions for those living behind them. Floods here were expected as 'the Sea Walls of Oldbury are so decayed and broken, that if they be not speedily amended, there is like to ensue great danger to the whole Country thereabouts, subject to the outflowing of the sea waters'.<sup>142</sup> The commission recognized that disruptive floods could be overcome with proper maintenance. In the east of the county, commissioners ordered the cleansing of Hatherop mill brook so that 'the surrounding and overflowing of the water there cannot be dangerous for her majesty's subjects to travel'.<sup>143</sup> Rather than reacting to floods as aberrations of nature and demonstrations of divine displeasure, those that lived and worked with water understood flooding as products of technological failure, making reference to communally constructed and understood 'local climate models'.<sup>144</sup> These narratives

presented floods as frequent life events that can be explained in technical terms, and that could and should be prepared for.

These understandings of flooding were also underpinned by political-economic assumptions. A petition to the Gloucestershire court notes how floods caused by watermills at Oldbury 'annoyed, hindered and oppressed' the inhabitants of Moreton.<sup>145</sup> Another order notes how the insufficient repair of floodgates caused the overflowing of 2,000 acres (8 square kilometres) of farm land in Oldbury, Moreton, Kington and Rockhampton tythings. A floodgate was not made sufficiently secure, and 'more salt water suffered to flow in, then it was penned, pounded and kept in the mill dam or mill pond two feet higher than the ancient view or mark'. This contravention of custom was all done purely for the 'private commodity and profit of one particular person for the gain of 20 marks yearly by the penning of the said water so high', to the 'general loss, hurt and damage' of local farmers.<sup>146</sup> Similarly, in the Lincolnshire Fens in 1547 the failure of upstream inhabitants on the River Welland to adequately scour the river caused flooding:

great abundance of fresh water (which should have his rightful course, passage and race in the said main river unto the sea without let) is stopped and disturbed of his said course and thereby doth excessively rebound and burst over the banks and greatly doth surround and destroy as well the meads, fields and pastures in Kesteven.<sup>147</sup>

Caused by an abrogation of customary duty, the river's 'right' to flow was interrupted and productive riverside pasturage damaged. Elsewhere the commissioners for Holland required work to be done so that water 'may pass orderly by' during a flood.<sup>148</sup> When river usage changed and floods ensued, the Surrey and Kent commission was quick to blame an innovating, profiteering miller. When Francis Lee, a gentleman from Rodderhithe, converted his gunpowder mill to a corn mill in 1579 'for his own private gain', the increased flow he

required to mill corn caused him to extract 'a great quantity of more water than in time past... and a great deal more water than his ponds or ditches [were] able to receive and hold'. Water then ran 'over on every side to the great annoyance, loss and hindrance of all the inhabitants, owners and farmers thereabouts.'<sup>149</sup> In these narratives fens, rivers and estuaries were all seen as shared hazards and resources which should not impinge on an individual's property in their ancient workings, or be monopolised for private gain. Situated in areas of both potential profit and peril, riverside communities relied on appeals to custom that sought to maintain safe coexistence with rivers. Narratives produced in these areas reflect a sense of Richard White's assertion that pre-modern societies' 'knew the river through the work the river demanded of them'.<sup>150</sup> Thus when the inhabitants of Moreton and the jurors of Holland and Kent took their complaints to their respective Commissions of Sewers, they expressed themselves using languages of custom, common rights and liberties that were grounded in a political economy of work. Deep-seated physical relationships with riparian resources are expressed when individuals and local communities are in dialogue with each other in court, attempting to regulate their riverine habitats, something wholly absent from commercial print literature.

These narrative explanations of floods in manuscript sources demonstrate that if providential interpretations were 'ingrained parochial responses to crisis', they were not the only responses. Local accounts presented here give another perspective on hydrographic cultures, showing that those that lived with flooding and managed complex hydrologic regimes on a daily basis had different narrative responses to damaging flooding to those that did not.

Despite these differences, the distinction between manuscript and print ought not to be drawn too precisely. There is evidence from parish register accounts that print narratives, or at least national news, had an impact on local understandings of disaster. The register for Long Newnton, on the Gloucestershire-Wiltshire border, contains the strongest suggestion of 'intertextuality' between manuscript and print accounts. Long Newnton is twenty-four kilometres inland from the Severn, safely ensconced on the other side of the Cotswold Edge escarpment. The author of a series of late seventeenth, and early eighteenth-century memoranda wrote long notes on weather and flooding, mainly concerning Severnside south Gloucestershire and Bristol. He recorded a flood in March 1688 which drowned 'lands bordering upon the river of Severn' and 'many Cellars in Bristol'. In July 1696 he reported that 'it rained very hard' for three days, and 'did a vast damage upon the lands & meadows bordering upon the Rivers in so much that it forced away down the Currents several summer ricks & it's... reported it did many thousands pounds damage upon the Avon & Thames & many other Rivers.'<sup>151</sup> In the impersonal and dramatic style of print pamphlets he related 'the most general calamity this nation ever felt', the 1703 storm, along with news that 'many people were knocked on the head in London', and many died in 'Monmouthshire and Glamorganshire'.<sup>152</sup> As well as knowing about the effects of flooding and storms, the author also displays intricate knowledge of the fortunes of the navy. Memoranda praising naval successes, specifically those of the Duke of Marlborough, take up more room than is given to accounts of county flood events. The year after the 1703 storm, the author reflected cheerfully on successes at sea: 'this happy year This nation had many remarkable occurrences of Gods good Providence in giving good success and victory to our

Armies & Fleets'.<sup>153</sup> Here a naval victory, but not a flood, was considered an example of God's providence.

Such late seventeenth-century examples are concurrent with the post-Restoration proliferation of print titles.<sup>154</sup> They are examples of the 'feedback' of national historical discourses into local memory.<sup>155</sup> The author of the Long Newnton register clearly felt he and his parish were part of a wider community, information about which could be gleaned through personal networks, or through print. Sources such as this provide an understanding of the interpretation of national news events in local communities, through the eyes of specific readers. These tantalising, oblique references to the world of print news point to an increased level of integration between the national, literary construction of disaster and its local memorialisation. In this later period we can see a general convergence of our three source bases. Daniel Defoe corresponded with many local observers in compiling his monumental account of the 1703 storm. Bishop Kennett encouraged the use of the parish register for the burgeoning discipline of local natural history. Local scholarship and '*provincial learning*' played a key role in the rise of natural science as an epistemological approach to nature in the early eighteenth-century.<sup>156</sup> And the oral evidence of custom presented at courts of sewers waned in significance as equity courts in England increasingly favoured written evidence at law.<sup>157</sup> Locally produced accounts remained distinct enough to be considered qualitatively different from print media, offering a local perspective on events, yet were not entirely divorced from wider discussions of events, particularly in the later seventeenth century. They are an important reminder of the multiple mental worlds and literary geographies that early modern parishioners accessed and articulated, and the



ways in which they converged as print and the written word played an increasing role in local cultural life.

## CONCLUSIONS

It is significant that few of the narratives of flood events in the manuscript sources examined here are framed providentially. If there is a providentialism at play then it is an unwritten structural belief in God as the primary cause and nature as His instrument. This lack of providentialism found among local narrative accounts chimes with recent findings for the early modern Netherlands.<sup>158</sup> Yet, in demonstrating that providentialism was not necessarily an 'ingrained parochial response to chaos and crisis', and that parishioners made plenty of other narrative responses, this article nevertheless bolsters recent studies of providence. It shows how conceptions of divine intervention through the natural world were 'essentially fluid and dynamic', with 'the boundaries and character of the natural and the supernatural responsive to changes in circumstance.'<sup>159</sup> With a multiplicity of explanatory frameworks at hand, the invocation of providence in the manuscript accounts under study here becomes more meaningful when it did happen. It shows that providential readings of the natural world were indeed potent, polemicized tools used in a conversation about faith, and symbolized more than a unified 'code of ethics'.<sup>160</sup>

More importantly, these examples show a remarkable diversity of modes of historical emplotment with regards to early modern floods. In three different discursive arenas we see floods caused and explained by a number of different phenomena, each linked to the motivations of their respective authors and the needs of their various audiences. As parts of coping strategies these various interpretive frames attended at different times, to the different needs of different 'imagined communities'.<sup>161</sup> Providential

literature set tragedy in a cosmological and national context, appealing to long-held beliefs in God's intervention in human and natural affairs. Parish registers localised events and provided images of communal solidarity and good neighbourliness. Narratives in courts of sewers' minutes afforded opportunities to fix blame and create a lasting testament to the responsibility of negligent neighbours or deficient flood defences. Together they attest to the variety of mental worlds inhabited by early modern people, and to the coexistence of the sacred, communal and legal geographies they inhabited, produced and contested.

Together they show how writing the environment was (and still is) a politically and spiritually inflected act. As contributors to a 2009 special issue of this journal on 'Narratives of Climate Change' demonstrated, such narratives 'are as much about the spatially and temporally subtle patterns of the social effects of climate variability as climatic crisis'.<sup>162</sup> Just as much as in the contemporary world, early modern geographical phenomena inspired a 'matrix of narratives' rather than a univocal chronicle of events.<sup>163</sup> The profusion of flood narratives points to early modern English 'hydrographic cultures' – cultures that expressed their hydrology and relationships to it *in writing*. Here we have cultures that richly textually encode relationships to water across genres in attempts to cope with the diverse impacts of flooding.

The experience of flooding was always locally negotiated, and local authors narrativised their experiences, and those of others, in ways that were socially relevant. In narrating accounts of notable floods, early modern parish registers and deponents to courts of sewers reveal understandings of riverine phenomena that demonstrate the variety of specific local physical and cultural systems that structured local life. When a flood came, these systems – be them familial, economic, religious or political – both influenced and were

influenced by an excess of water. By placing narratives of flooding back into their immediate local contexts we obtain a better understanding of the experience of damaging socio-natural events and the workings of the communities that experienced them.

## FIGURES



Figure 1. Anon., 1607. A true report of certain wonderful overflowings of waters, now lately in Somersetshire, Norfolk, and other places, London, 1607; William Jones, God's Warning to His people of England, London, 1607; Anon., 1607. Lamentable news out of Monmouthshire in Wales, London, 1607; Anon., More Strange News: Of Wonderful accidents happening by the late overflowings of Waters, London, 1607, A2v.

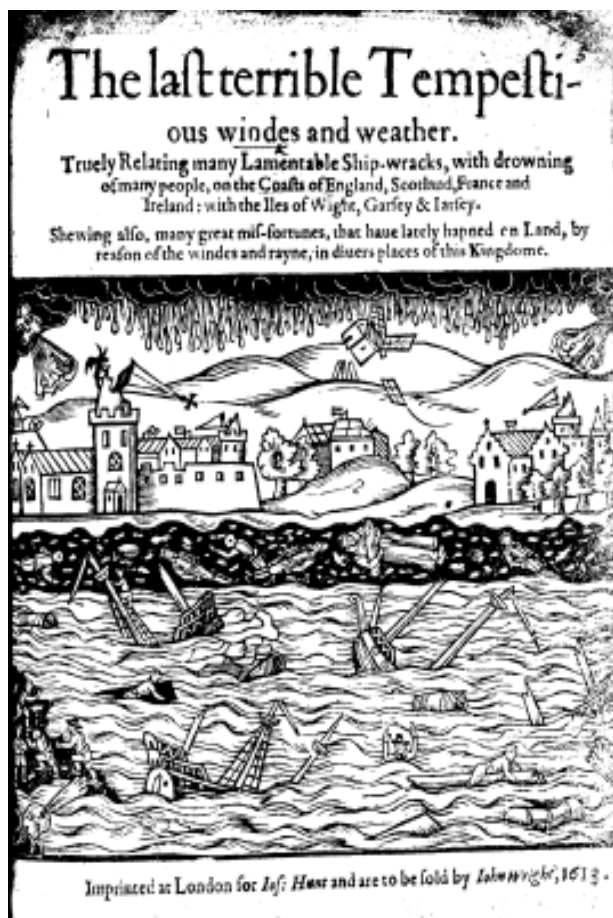


Figure 2. Anon., *The last terrible tempestuous winds and weather...*, London, 1613; Anon., *The wonders of this windy winter ...*, London, 1613; Anon., *Klägliche und erbarmliche neue Zeitung Von der uberauß schrecklichen und grossen Wasserfluth welche sich in diesem 1651 Jahr*, Köln,

## NOTES

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<sup>2</sup> Bryant and Haslett, Catastrophic wave erosion, 255; M. Williams, *The Draining of the Somerset Levels*, Cambridge, 1970, 87.

<sup>3</sup> Anon., *1607. Lamentable News out of Monmouthshire in Wales Containing, the Wonderful and Most Fearful Accidents of the Great Overflowing of Waters in the Said County...*, London, 1607, B4v.

<sup>4</sup> Quoted in S.D. Cole, *The Sea Walls of the Severn*, Bristol, 1912, 23. The authors use the 'Old Style', Julian Calendar dating convention, in which the new year began on 25 March, not 1 January. The Julian Calendar, used in England until 1752, was also ten days behind the Julian Calendar in 1607.

<sup>5</sup> Gloucestershire Court of Sewers: General Minutes 1583-1606[8] D272 1/1 21, Gloucestershire Archives [hereafter GA].

<sup>6</sup> Simon Schama introduced the phrase 'hydrographic culture' in *The Embarrassment of Riches: An Interpretation of Dutch Culture in the Golden Age*, London, 1988, 44.

<sup>7</sup> B. Capp, Popular literature, in: B. Reay (Ed), *Popular Culture in Seventeenth-Century England*, London, 1988, 204.

<sup>8</sup> M. Juneja and F. Mauelshagen, Disasters and pre-industrial societies: historiographical trends and comparative perspectives, *The Medieval History Journal* 10 (2007) 5.

<sup>9</sup> C. Mauch, Introduction, in: C. Mauch, C. Pfister (Eds), *Natural Disasters, Cultural Responses: Case Studies Toward a Global Environmental History*, Plymouth, 2009, 4; G. Massard-Guilbaud, Introduction: the urban catastrophe – challenge to the social, economic, and cultural order of the city, in: G. Massard-Guilbaud, H.L. Platt, D. Schott (Eds), *Cities and Catastrophes: Coping With Emergency in European History*, Frankfurt, 2002, 10; U. Lübken and C. Mauch, Uncertain environments: natural hazards, risk and insurance in historical perspective, *Environment and History* 17 (2011) 4.

<sup>10</sup> G. Bankoff, quoted in Massard-Guilbaud, Introduction, 4.

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- <sup>11</sup> G. Bankoff, Time is of the essence: disasters, vulnerability and history, *International Journal of Mass Emergencies and Disasters* 22 (2004) 29.
- <sup>12</sup> S. Greenblatt, *Learning to Curse: Essays in Early Modern Culture*, New York, 1990, 164; W. Cronon, A Place for Stories: Nature, History, and Narrative, *The Journal of American History* 78 (1992) 1350.
- <sup>13</sup> A. Stock and C. Stott, Introduction: narratives of disaster, in: A. Stock and C. Stott (Eds), *Representing the Unimaginable: Narratives of Disaster*, Frankfurt am Main, 2007, 11.
- <sup>14</sup> H. Marchitello, *Narrative and meaning in early modern England: Browne's skull and other histories*, Cambridge, 1997, 4-5; B. Luckin has advocated a similar approach, referring to the 'social, psychological and symbolic system or systems within which accidents occur and through which meaning is bestowed upon them', see Luckin, Accidents, disasters and cities, *Urban History* 20 (1993) 182.
- <sup>15</sup> Y.F. Tuan, *Landscapes of Fear*, Oxford, 1979, 6.
- <sup>16</sup> F. Mauelshagen, Disaster and political culture in Germany since 1500, in: Mauch, Pfister (Eds), *Natural Disasters, Cultural Responses*, 67.
- <sup>17</sup> I. Scrase, and W. Sheate, Re-framing Flood Control in England and Wales, *Environmental Values* 14 (2005) 117.
- <sup>18</sup> B. Williams and A. Matheny, *Democracy, Dialogue, and Environmental Disputes: The Contested Languages of Social Regulation*, New Haven, 1995, 6.
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- <sup>20</sup> J. Grattan and M. Brayshay, An Amazing and Portentous Summer: Environmental and Social Responses in Britain to the 1783 Eruption of an Iceland Volcano, *The Geographical Journal* 161 (1995) 130.
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<sup>23</sup> G. Bankoff, The ‘English lowlands’ and the North Sea basin system: a history of shared risk, *Environment and History* 19 (2013) 3–37.

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<sup>25</sup> V. Jankovic, *Reading the Skies: A cultural history of English weather, 1650-1820*, Chicago, 2000.

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<sup>29</sup> T. Knell, *A Declaration of Such Tempestuous, and Outrageous Floods, as Hath Been in Divers Places of England*, London, 1571, A3v; Anon., *Miracle upon Miracle. Or a True Relation of the Great Floods Which Happened in Coventry, in Lynne, and Other Places, on the 16. and 17. Days of April Last Past, in this Present Year of our Lord God, 1607*, London, 1607, 4 [sic. 6].

<sup>30</sup> Anon., 1607. *A True Report of Certain Wonderful Overflowing of Waters, Now Lately in Somersetshire, Norfolk, and Other Places of England*, London, 1607, A2.

<sup>31</sup> King James Version, Luke 13:3.

<sup>32</sup> Anon., 1607 *Lamentable News Out of Monmouthshire*, A3v.

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<sup>41</sup> O.P. Grell, Faith and early modern ways of making sense of natural disasters, in: Stock and Stott (Eds), *Representing the Unimaginable*, 39.

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<sup>45</sup> Walsham, *Providence*, 3.

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<sup>47</sup> T. Watt, *Cheap Print and Popular Piety, 1550-1640*, Cambridge, 1994, 126.

<sup>48</sup> Walsham, *The Reformation of the Landscape*, 501.

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<sup>49</sup> Green, *Print and Protestantism*, 438.

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<sup>51</sup> C. Rohr, Writing a catastrophe: describing and constructing disaster perception in narrative sources from the late middle ages, *Historical Social Research* 32 (2007) 88-102.

<sup>52</sup> J. Raymond, Irrational, impractical and unprofitable: reading the news in seventeenth-century Britain, in: K. Sharpe, S.N. Zwicker (Eds), *Reading, Society and Politics in Early Modern England*, Cambridge, 2003, 188.

<sup>53</sup> V. Janković, The politics of sky battles in early Hanoverian Britain, *Journal of British Studies* 41 (2002) 432; J. Raymond, *Pamphlets and Pamphleteering in Early Modern Britain*, Cambridge, 2003, 114-15; Green, *Print and Protestantism*, 38.

<sup>54</sup> Green, *Print and Protestantism*, 19.

<sup>55</sup> Peter Lake has noted this was also the case with murder pamphlets, see Lake and Questier, *The Antichrist's Lewd Hat*, 6, 13.

<sup>56</sup> Raymond, *Pamphlets*, 339-341; the unregistered title is Anon., *More Strange News: Of Wonderful Accidents Happening by the Late Overflowings of Waters*, London, 1607.

<sup>57</sup> cf. E. Arber (Ed), *A Transcript of the Registers of the Company of Stationers of London. 1554-1640 A.D.*, 5 volumes, London, 1875-77, iii 341.

<sup>58</sup> Calculated from Arber (Ed), *A Transcript of the Registers of the Company of Stationers of London*, i-v; G.E.B. Eyre and G.R. Rivington (Eds), *A Transcript of the Registers of the Worshipful Company of Stationers from 1640-1708*, 3 volumes, London, 1913-14.

<sup>59</sup> Quoted in G. Johnson, John Trundle and the Book-Trade 1603-1626, *Studies in Bibliography* 39 (1986) 178.

<sup>60</sup> Johnson, *John Trundle*, 183.

<sup>61</sup> Calculated from Watt, *Cheap Print and Popular Piety*, 359.

<sup>62</sup> White and White registered eight titles in the Register of the Stationer's Company, with a further two unregistered extant pamphlets, viz., Anon., *1607 Lamentable newes out of Monmouthshire in Wales* (London, 1607), and Anon., *More strange newes*; Watt, *Cheap Print and Popular Piety*, 359-60.

<sup>63</sup> Lake and Questier, *The Antichrist's Lewd Hat*, 14.

<sup>64</sup> Morgan, The representation and experience of English urban fire disasters.

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<sup>65</sup> L. Stevenson, *Praise and Paradox: Merchants and Craftsmen in Elizabethan Popular Literature*, Cambridge, 1984, 15, 21.

<sup>66</sup> Stevenson, *Praise and Paradox*, 31; Green, *Print and Protestantism*, 36.

<sup>67</sup> Anon., 1607. *A True Report of Certain Wonderful Overflowings of Waters, Now Lately in Somersetshire, Norfolk, and Other Places*, London, 1607, B2v.

<sup>68</sup> Knell, *A Declaration*, C4.

<sup>69</sup> L. Daston and K. Park, *Wonders and the Order of Nature, 1150-1750*, New York, 1997, 191.

<sup>70</sup> Anon., 1607 *Lamentable newes out of Monmouthshire*, A3.

<sup>71</sup> Anon., *A Wonderfull cry from the country*, 7.

<sup>72</sup> Anon., *A True and Perfect Relation of The great Damages done by the late Great Tempest, and overflowing of the TYDE Upon the Coasts of Lincolnshire and County of Norfolk*, London, 1671, A4; cf. Anon., *A Wonderfull cry from the country*, 3, and T.I., *A miracle, of miracles*, title page.

<sup>73</sup> D. Randall, *Credibility in Elizabethan and Early Stuart Military News*, London, 2008, 96-105; cf. Anon., *More strange newes*, sig. B1.

<sup>74</sup> Hamblyn, Introduction, in: Defoe, Hamblyn (Ed), *The Storm*, xxiii.

<sup>75</sup> Defoe, *The Storm: or, a collection of the most remarkable casualties and disasters which happen'd in the late dreadful tempest, both by sea and land*, in: Defoe, Hamblyn (Ed), *The Storm*, 55.

<sup>76</sup> Green, *Print and Protestantism*, 437.

<sup>77</sup> A. Cambers, *Godly Reading: Print, Manuscript and Puritanism in England, 1580-1720*, Cambridge, 2011, 33.

<sup>78</sup> W.E. Tate, *The Parish Chest: A Study of the Records of Parochial Administration in England*, Cambridge, 1983, 45.

<sup>79</sup> E.A. Wrigley and R.S. Schofield, *The Population History of England, 1541-1871: A Reconstruction*, Cambridge, 1981.

<sup>80</sup> A.E.B. Owen, Records of commissions of sewers, *History* 52 (1967) 35-38.

<sup>81</sup> e.g. D. Summers, *The Great Level: A History of Drainage and Land Reclamation in the Fens*, London, 1976; H.C. Darby, *The Changing Fenland*, Cambridge, 1983; S. Oosthuizen and F. Willmoth (Eds), *Drowned and*

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<sup>82</sup> W. Coster, Popular religion and the parish register 1538-1603, in: K. French, G. Gibbs, B. Kümin (Eds), *The Parish in English Life 1400-1600*, Manchester, 1997, 98.

<sup>83</sup> R. Chester Waters, *Parish Registers in England: Their history and Contents*, London, 1882, 5-6; Tate, *The Parish Chest*, 45.

<sup>84</sup> Tate, *The Parish Chest*, 44-5.

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<sup>86</sup> A. Smyth, *Autobiography in Early Modern England*, Cambridge, 2010, 203-4.

<sup>87</sup> Tate, *The Parish Chest*, 45; Smyth, *Autobiography*, 190-91.

<sup>88</sup> Cambers, *Godly Reading*, 170.

<sup>89</sup> G. Leveson Gower (Ed), *A register of all the christnings, burialles & weddinges within the parish of Saint Peeters upon Cornhill*, London, 1877, ii-vii.

<sup>90</sup> Chester Waters, *Parish Registers in England*, 69.

<sup>91</sup> Chester Waters, *Parish Registers in England*, 69.

<sup>92</sup> A. Wood, *The Memory of the People: Custom and Popular Senses of the Past in Early Modern England*, Cambridge, 2013, 258; S. Hobbs, 'The abstracts and brief chronicles of the time': memoranda and annotations in parish registers 1538-1812, *The Local Historian* 38 (2008) 95.

<sup>93</sup> L. McEwen and O. Jones, 'Building local/lay flood knowledges into community flood resilience planning after the July 2007 floods, Gloucestershire, UK', *Hydrology Research* 43 (2012) 675-688.

<sup>94</sup> A. Fox, *Oral and Literate Culture in England, 1500-1700*, Oxford, 2000, 215.

<sup>95</sup> N. Whyte, *Inhabiting the Landscape: Place, Custom and Memory, 1500-1800*, Oxford, 2009, 7; Fox, *Oral and Literate*, 263.

<sup>96</sup> The 'Black Book' of the Corporation of Tewkesbury, in: William Dyde, *The History and Antiquities of Tewkesbury from the Earliest Periods to the Present Time Collected from Ancient Records and other Authentic Materials, to which is added some account of the medicinal water near Tewkesbury*, Tewkesbury, 1790, 94-5. Although not a parish register, the Black Book of the Corporation of Tewkesbury is a communal administrative

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document kept by the corporation, rather than the parish, that contains a series of lengthy memoranda in the style of a parish register.

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<sup>98</sup> Arlingham Parish Register, Baptisms, marriages and burials 1539-1645 P18 IN 1/1 58v, GA.

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<sup>100</sup> Arlingham Parish Register, GA, 58v.

<sup>101</sup> A. Green, An Almondsbury Parish Register, *Transactions of the Bristol and Gloucestershire Archaeological Society* 78 (1959) 177-178.

<sup>102</sup> D. Rollison, *The Local Origins of Modern Society: Gloucestershire 1500-1800*, London, 1992, 71-73.

<sup>103</sup> R. Darnton, *The Great Cat Massacre and Other Episodes in French Cultural History*, Harmondsworth, 1984, 13.

<sup>104</sup> Defoe, *The Storm*, 72.

<sup>105</sup> D. Woolf, *The Social Circulation of the Past: English Historical Culture 1500-1730*, Oxford, 2003, 273.

<sup>106</sup> Anon., 1607. *A True Report of Certain Wonderful Overflowings of Waters, Now Lately in Somersetshire, Norfolk*, A2.

<sup>107</sup> Woolf, *Social Circulation*, 273.

<sup>108</sup> Parish Register of Reading St. Mary, Reading St Mary Parish Records, D/P98/1/1, Berkshire Record Office.

<sup>109</sup> H.S. Cooper (Ed), *The Oldest Register Book the Parish of Hawkshead in Lancashire. 1568-1704*, London, 1897, lx.

<sup>110</sup> Register of baptisms, marriages and burials, 1723-1781, Flamstead St. Leonard Parish Records DP38/1/2 back cover, Hertfordshire Archives and Local Studies; cf. W. Brigg (Ed), *The Parish Registers of Otley, Co. York, Part 2*, Leeds, 1912, 184.

<sup>111</sup> Register of baptisms marriages and burials 1561-1689, Parish of St Peter Welford-on-Avon DR 892/1 100, Warwickshire Record Office [hereafter WRO].

<sup>112</sup> Long Newnton Parish Registers, Baptisms, marriages and burials, 1648-1739, Long Newnton parish records P229 IN 1/1 71, GA.

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<sup>113</sup> Green, Almondsbury Parish Register, 177-178.

<sup>114</sup> Quoted in J. Simpson, Extracts from the parish registers of St. Michael's, Stamford, *The Reliquary* 18 (1878) 96n.

<sup>115</sup> Tasley Register, in: W.G.D. Fletcher (Ed), *Shropshire Parish Registers. Diocese of Hereford. Vol. I.*, Private Press, 1900, 11.

<sup>116</sup> 'Baptisms', in: T. Wainwright (Ed), *Barnstaple Parish Register of Baptisms, Marriages and Burials 1538 A.D. to 1812 A.D.*, Exeter, 1903, 50.

<sup>117</sup> Welford Parish Register, WRO, 100.

<sup>118</sup> Welford Parish Register, WRO, 100.

<sup>119</sup> Arlingham Parish Register, GA, 58v.

<sup>120</sup> 'Churching' was the ritual reintegration of mothers back into the parish church after giving birth.

<sup>121</sup> Arlingham Parish Register, GA, 58v.

<sup>122</sup> Walsham, *Providence*, 3.

<sup>123</sup> Headcorn Ss. Peter and Paul Composite Register 1611-1716, Headcorn Ss. Peter and Paul Parish Records P181/1/2 cover, Kent Archives,

<sup>124</sup> Green, Almondsbury Parish Register, 178.

<sup>125</sup> Cooper (Ed), *The Oldest Register Book*, lx.

<sup>126</sup> S. Hindle, *The State and Social Change in Early Modern England*, Basingstoke, 2000, 94.

<sup>127</sup> Wood, *The Memory of the People*, 278.

<sup>128</sup> D. Liverman, Drought Impacts in Mexico: Climate, Agriculture, Technology, and Land Tenure in Sonora and Puebla, *Annals of the Association of American Geographers* 80 (1990) 50; G. Endfield, Archival explorations of climate variability and social vulnerability in colonial Mexico, *Climatic Change* 83 (2007) 10-14.

<sup>129</sup> Wood, *The Memory of the People*, 282.

<sup>130</sup> S. Hindle, 'The Political Culture of the Middling Sort in English Rural Communities, c. 1550-1700', in: T. Harris (Ed), *The Politics of the Excluded, c. 1500-1850*, Basingstoke, 2001, 125-152.

<sup>131</sup> General Minutes 1583-1606[8] 34, GA; General Minutes 1615-1631, 1635 2r, GA.

<sup>132</sup> Anon., *Instructions for Jury-Men on the Commission of Sewers*, London, 1664, 1.

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<sup>133</sup> A Verdict at Stamford 6 July 1555, Spalding Sewers 473/2 10, Lincolnshire Archvies, lists present and future members of parliament for Stamford and Lincoln Kenelm Digby, Edward Dymock and William Cecil amongst the Commissioners; General Minutes 1615-1631, 1635 57v, GA.

<sup>134</sup> General Minutes 1615-1631, 1635 57, GA.

<sup>135</sup> Fox, *Oral and Literate Culture*, 293.

<sup>136</sup> J. Scott, *The Art of Not Being Governed: An Anarchist History of Upland Southeast Asia*, New Haven, 2013, 230. See also, Wood, *The Memory of the People*, 272; Simon Sandall, Custom, Memory and the Operations of Power in the Seventeenth-Century Forest of Dean, in: F. Williamson (Ed), *Locating Agency: Space, Power and Popular Politics*, Newcastle, 2010, 133-160; N. Whyte Landscape, Memory and Custom: Parish Identities c. 1550–1700, *Social History* 32 (2007), 166-186.

<sup>137</sup> J. Bruce (Ed), *Calendar of state Papers Domestic, vol. 161: Charles I, 1629-31*, London, 1860, 30; cf. Summers, *The Great Level*, 63.

<sup>138</sup> General Minutes 1583-1606[8] 22, GA.

<sup>139</sup> Surrey and Kent Commissioners of Sewers, *Court Minutes of the Surrey & Kent Sewer Commission. Vol. 1*, London, 1909, 271.

<sup>140</sup> Surrey and Kent Commissioners of Sewers, *Court Minutes*, 267.

<sup>141</sup> M. Kirkus and A.E.B. Owen (Eds), *The Records of the Commissioners of Sewers in the Parts of Holland 1547-1603*, 3 volumes, Welwyn Garden City, 1977, iii, 33.

<sup>142</sup> General Minutes, 1615-1631, 1635 27r, GA.

<sup>143</sup> Presentments and orders of the Commissioners of Sewers, 1596-97, Bazley and Webb families of Hatherop, D540/T29, GA.

<sup>144</sup> J.F. Richards, *The Unending Frontier: An Environmental History of the Early Modern World*, Los Angeles, 2003, 64.

<sup>145</sup> General Minutes 1583-1606[8] 41, GA.

<sup>146</sup> General Minutes 1583-1606[8] 51, GA.

<sup>147</sup> Kirkus (Ed), *The Records of the Commissioners of Sewers in the Parts of Holland*, i 33.

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<sup>149</sup> Surrey and Kent Commissioners of Sewers, *Court Minutes*, 331.

<sup>150</sup> R. White, *The Organic Machine: The Remaking of the Columbia River*, New York, 1995, 4.

<sup>151</sup> Long Newnton Parish Registers 71, GA.

<sup>152</sup> Long Newnton Parish Registers 72, GA.

<sup>153</sup> Long Newnton Parish Registers 72-3, GA.

<sup>154</sup> M. Knights, *Representation and Misrepresentation in Later Stuart Britain Partisanship and Political Culture*, Oxford, 2005, 16.

<sup>155</sup> Woolf, *Social Circulation*, 273.

<sup>156</sup> V. Jankovic, The place of nature and the nature of place: the chorographical challenge to the history of British provincial science, *History of Science* 38 (2000) 80-83.

<sup>157</sup> Woolf, *Social Circulation*, 351, 362.

<sup>158</sup> A. de Kraker, Two Floods Compared: Perception of and Response to the 1682 and 1715 Flooding Disasters in the Low Countries, in: K. Pfeifer and N. Pfeifer (Eds), *Forces of Nature and Cultural Responses*, Dordrecht, 2013, 199.

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<sup>160</sup> Walsham, *The Reformation of the Landscape*, 501; Lake and Questier, *The Antichrist's Lewd Hat*, 318.

<sup>161</sup> B. Anderson, *Imagined Communities: reflections on the origin and spread of nationalism*, London, 2006.

<sup>162</sup> S. Daniels and G. Endfield, Narratives of climate change, *Journal of Historical Geography* 35 (2009) 216.

<sup>163</sup> Daniels and Endfield, Narratives of climate change, 222.